

Amendments to the Specification:

Please add the following paragraphs on page 4 after line 21.

--Figure 6 shows a schematic of a timing device in accordance with the invention..

Figure 7 shows a schematic of a timing device in accordance with the invention.

Figure 8 is a view of a timing device in accordance with the invention.

Figure 9 is a cross-sectional view of a timing device of Figure 8.

Figure 10 shows a schematic of a timing device in accordance with the invention.--

Please replace the paragraph beginning on page 4, line 24 with the following rewritten paragraph:

--The invention has numerous advantages compared to prior art timing devices. Because the indicator device combines the light source (the light emissive element) and the ~~patterning~~ patterning layer), the timing device takes up less space and can therefore be used in some applications where a prior art timing device would not fit. Furthermore, combining the light source and the patterning layer simplifies the system making it more robust and ~~simpler~~ simple. The light emissive elements suggested typically consume less power and generate less heat than the prior art lasers and other light sources.--

Please replace the paragraph beginning on page 6, line 18 with the following rewritten paragraph:

--A preferred example of a suitable a light-emitting electroluminescent (EL) material is zinc sulfide doped with copper or manganese. Those skilled in the art will be able to readily select suitable electroluminescent material, taking into consideration factors such as conditions of humidity, temperature, sun exposure, etc. in which the final article will be used, desired color of light emission, available power sources, etc.--

Please replace the paragraph beginning on page 10, line 11 with the following rewritten paragraph:

--Preferably, the light emissive element emits in more than 1 wavelength and the detector detects in more than one wavelength. By utilizing more than one wavelength more information can be detected and can provide timing redundancy for critical applications such as military aircraft or elevators, ~~were~~ where the failure of the timing device could result in the loss of equipment or human life.--

Please add the following new paragraph on page 11, after line 12.

--Illustrated in Figures 6 and 7 is a timing device 70 that has a disc indicator device 74 and a sensor device 72 that detects the position of the indicator device 74. The sensor 72 is provided with a shield 76 that shields light from the sensor 77, except in a narrow viewing angle through opening 78.--

Please replace the paragraph beginning on page 12, line 14 with the following rewritten paragraph:

--The indicator is preferably arcuate in shape to that it can fit to the contour of an object to be timed. For example, a rotary shaft could use an indicator element in an arcuate shape. Figures 8 and 9 illustrate a timing device 80 having an indicator element 84 in a tubular shape. Figure 9 is a section on line 9-9. The location of this indicator 84 can be sensed by sensors 86 and 88 attached to the element 82 that surrounds the tubular shaped indicator element.---

Please replace the paragraph beginning on page 12, line 17 with the following rewritten paragraph:

--The indicator is preferably tubular in shape to so that it can fit around the contour of an object to be timed. For example, a rotary shaft could use an indicator element in a tubular shape so that the indicator element surrounds the rotary shaft.--

Please replace the paragraph beginning on page 12, line 21 with the following rewritten paragraph:

--Preferably, the indicator element is in a tubular shape with the light-emissive element emitting light on the exterior of the tube. This facilitates the detector being inside of the tube being illuminated from the light emitting element on the outside of the tube through the pattern layer on the inside of the light emissive element. This configuration ~~save~~ saves space in a device and enables the timing device to be used in device that could not accommodate a typical prior art timing device.--

Please replace the paragraph beginning on page 13, line 3 with the following rewritten paragraph:

--In another embodiment the indicator is preferably in the form of a strip. A strip indicator element is useful for positioning for movement in a linear motion. The strip encoder is produced similar to a disk encoder. In Figure 10 there is illustrated a strip timing device 90. The indicator 94 is moved past a sensor 92 that senses the linear movement.--

Please replace the paragraph beginning on page 14, line 5 with the following rewritten paragraph:

--Figure 4 illustrates this embodiment of the invention where the rear electrode of the light emissive element 36 is transparent and a second patterning layer 52 is applied over the transparent rear electrode 51 of the indicator element 35. The layers in order from the first patterning layer 37 to the second patterning layer 52 are a first patterning layer 37, a transparent substrate 39, transparent conductive layer 41, a first binder layer 43, electroluminescent particle layer 45, a second binder layer 47, an insulating layer 49, a transparent rear electrode 51, and a second patterning layer 52.--

Please replace the paragraph beginning on page 20, line 10 with the following rewritten paragraph:

--Figure 5 illustrates this embodiment of the invention of the indicator element 53 where the transparent conductive layer is patterned and forms the patterning layer by selectively emitting light in a pattern based on the pattern in the transparent conductive layer. The layers 69 in order from the transparent substrate to the rear electrode are a transparent substrate 55, a

patterned transparent conductive layer 57, a first binder layer 59, electroluminescent particle layer 61, a second binder layer 63, an insulating layer 65, and a transparent rear electrode 67.--